

PAIR OF PUMPS

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Instruction Manual & Safety Warnings

Combination Primary and Backup Sump Pump System Model PS-C30





Scan the QR code for more information about the PS-C30 Combination Sump Pump System

IMPORTANT: Even if you have the Pro Series[™] PS-C30 Combination Sump Pump System installed by someone else, you must read and follow the safety information contained in this manual. Failure to do so could result in property damage, serious injury, or death.

Important Safety Warnings & Instructions

SAVE THESE INSTRUCTIONS. This manual contains important SAFETY WARNINGS and OPERATING INSTRUCTIONS for the Pro Series combination sump pump system. You will need to refer to it before attempting any installation or maintenance. **ALWAYS** keep these instructions with the unit so that they will be easily accessible.

Failure to read and follow these warnings and instructions could result in property damage, serious injury, or death. It is important to read this manual, even if you did not install the Pro Series combination sump pump system, since this manual contains safety information regarding the use and maintenance of this product. **DO NOT DISCARD THIS MANUAL.**

ELECTRICAL PRECAUTIONS

This installation must be in accordance with the National Electric Code and all applicable local codes and ordinances.

Risk of electrical shock and fire hazard. May result in death, serious injury, shock or burns. To help reduce these risks, observe the following precautions:

- **DO NOT** walk on wet areas of the basement until all power has been turned off. If the main power supply is in a wet basement, call an electrician.
- ALWAYS disconnect the pump from the power source before servicing or making adjustments.
- ALWAYS unplug the control unit and disconnect the cables from the battery before attempting any maintenance or cleaning.
- **NEVER** handle the pump or motor with wet hands or when standing on a wet or damp surface while the pump is plugged into the power source.
- MAKE SURE A PROPERLY GROUNDED RECEPTACLE IS AVAILABLE. This system is wired with 3-prong grounded plugs. To reduce the risk of electric shock, be certain that it is only connected to a properly grounded 3-prong receptacle. If you have a 2-prong

receptacle, have a licensed electrician replace it with a 3-prong receptacle according to local codes and ordinances.

- **NEVER** bypass grounding wires or remove the ground prong from the plug.
- **DO NOT** use an extension cord. The electrical outlet should be within the length of the pump's power cord, and at least 4' above the floor level to minimize potential hazards from flood conditions.
- **DO** protect the electrical cord from sharp objects, hot surfaces, oil and chemicals. Avoid kinking the cord.
- **MAKE SURE** the supply circuit has a dedicated fuse or circuit breaker rated to handle the power requirements noted on the nameplate of the pump.
- **DO NOT** use an attachment that is not recommended or sold by the manufacturer. It may result in a risk of fire or injury from an electrical shock.
- The maximum amperage for the primary controller is 12 Amps.

CAUTION

To reduce the risk of hazards that can cause injury or property damage, observe the following precautions:

- **DO NOT** use the power cord or strain relief to carry the pumps. Use the handle of the main pump.
- DO NOT pull on the float switch cords.
- **DO NOT** pull on the cord to disconnect the system or the pump. Pull the plug.
- **DO NOT** expose the control units to water, rain or snow.
- **DO NOT** place the controllers on the floor. The electrical outlet should be within the length of the pump's power cord and at least 4' above the floor to minimize potential hazards from flood conditions.
- **DO NOT** operate the pumps or control units if they have been damaged in any way.
- DO NOT use pumps in pits handling raw sewage, salt water, or hazardous liquids. This product is for ground water use only.
- **DO NOT** disassemble the pumps or control units. When service is required, contact Glentronics' technical support at 800-991-0466. Return the product to the manufacturer for any repairs at the following address:

Glentronics, Inc., Attn: Service 645 Heathrow Drive, Lincolnshire, IL 60069-4205

BATTERY PREPARATION

A WARNING/POISON

Sulfuric acid can cause blindness or severe burns. Avoid contact with skin, eyes, or clothing. In the event of an accident, flush with water and call a physician immediately. **KEEP OUT OF REACH OF CHILDREN.**

To help reduce these risks, observe the following precautions:

- Someone should be within range of your voice or close enough to come to your aid when you work near a lead-acid battery.
- Have plenty of fresh water and soap nearby in case battery acid contacts skin, clothing or eyes.
- Wear eye and clothing protection and avoid touching your eyes while working with battery acid or working near the battery.
- If battery acid contacts skin or clothing, wash immediately with soap and water. If acid enters eye, immediately flood eye with running cold water for at least 15 minutes and get prompt medical attention.

A WARNING

Battery posts and terminals contain lead, lead compounds or chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Wash hands after handling. See www. p65warnings.ca.gov for more information.

Battery fluid can expose you to chemicals including strong inorganic acid mists containing sulfuric acid, which is known to the State of California to cause cancer. For more information go to www.P65warnings.ca.gov.

BATTERY PRECAUTIONS

🛕 DANGER

Explosive gases could cause serious injury or death. Cigarettes, flames or sparks could cause battery to explode in enclosed spaces. Charge in well-ventilated area. Always shield eyes and face from battery. Keep vent caps tight and level.

Sulfuric acid can cause blindness or severe burns. Avoid contact with skin, eyes or clothing. In the event of accident, flush with water and call a physician immediately. KEEP OUT OF REACH OF CHILDREN.

To help reduce these risks, observe the following precautions:

• NEVER smoke or allow a spark or flame in

the vicinity of the battery.

- Use the Pro Series control unit for charging a LEAD-ACID battery only. **DO NOT** use the control unit for charging dry-cell batteries that are most commonly used with home appliances.
- Be sure the area around the battery is wellventilated.
- When cleaning the battery, first fan the top of the battery with a piece of cardboard or another <u>nonmetallic</u> material to blow away any hydrogen or oxygen gas that may have been emitted from the battery.
- **DO NOT** drop a metal tool onto the battery. It might spark or short-circuit the battery and cause an explosion.
- Remove personal metal items such as rings, bracelets, watches, etc. when working with a lead-acid battery. A short circuit through one of these items can melt it, causing a severe burn.
- ALWAYS remove the charger from the electrical outlet before connecting or disconnecting the battery cables. Never allow the rings to touch each other.
- Check the polarity of the battery posts. The POSITIVE (+) battery post usually has a plus sign near it and the NEGATIVE (-) post has a minus sign nearby.



- When connecting the battery cables, first connect the large ring on the end of the RED wire to the POSITIVE (+) bolt and then connect the small ring on the end of the BLACK wire to the NEGATIVE (-) bolt of the battery.
- Always keep the cover secured on the battery box by slipping the tabs through the fittings on the front and back of the box. **DO NOT** place anything on top of the battery or the battery box cover.

A DANGER

Do not use system to pump flammable or explosive fluids such as gasoline, fuel oil, kerosene, etc.

DO NOT use this system in pits handling raw sewage or other hazardous liquids.

Introduction

The Pro Series pair of pumps combination system is designed to provide both primary and backup pumping capabilities. The primary pump will operate as long as it is receiving AC power. If the power is interrupted, or more water is coming into the sump than the AC pump can handle, the backup sump pump will begin pumping automatically. The backup system has unique monitoring features that diagnose a problem and sound an alarm. A light on the display panel of the control unit will indicate the cause of the alarm and the corrective action. This system has been preassembled for easy installation.

To extend the battery runtime, two batteries may be connected to the Pro Series C30 system by purchasing a second battery as well as a set of battery jumper cables. Jumper cables specifically designed for this use (Model PJC) are available from the manufacturer, Glentronics, Inc.

The Combination Sump Pump System includes:

- A ¹/₃ HP primary pump with a caged dual float switch, and a blue piggyback controller that plugs into the wall outlet
- A gray backup pump
- A control unit with a dual float switch, battery cables and a 1.6 Amp charger
- A battery box
- A no-hub coupling

You will also need to supply:

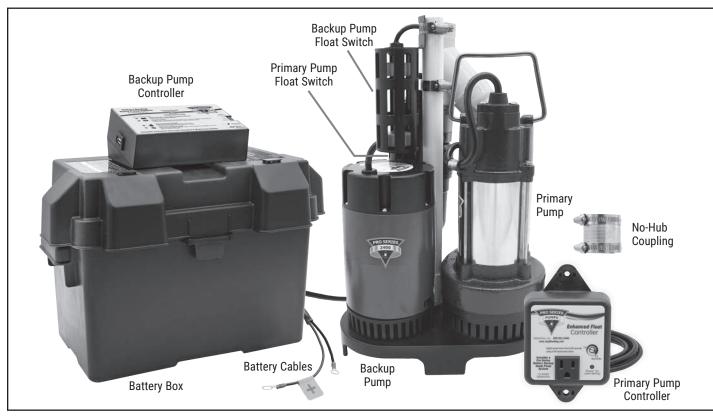
A Pro Series B12-100 standby battery. Pro Series standby batteries are specifically designed to work with your battery backup sump pump system. Glentronics can not guarantee the compatibility of other brands of batteries. For optimal performance the use of a Pro Series standby battery is highly recommended.



- **DO NOT** use an automotive battery with this system
- A surge protector (recommended for the backup controller)

For some installations you may need these additional items:

- 1½" rigid PVC pipe to connect to the existing plumbing
- A PVC pipe connector or a rubber union
- PVC pipe cleaner and cement





To connect two batteries you will need:

- Two (2) batteries of same type, age and capacity (so they will have equal power and charge properly). **D0 N0T** use batteries of different types, ages or capacities.
- Another battery box
- A set of battery cables with rings on both ends to connect the two batteries together (Model PJC, available from Glentronics, Inc.)



System Specifications

| Power supply requirements 115 volts, 60 Hz |
|---|
| AC pump pumping capacity. 3,000 GPH @ 10' 50 GPM @ 10' |
| DC pump pumping capacity. 1,850 GPH @ 10' 30 GPM @ 10' |
| Overall dimensions11" W x 17%" H |

Installing the Pipe and Pump

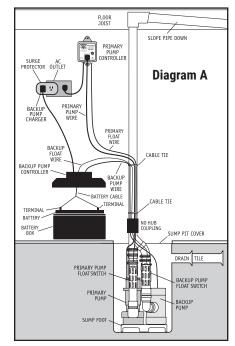
The Pro Series combination system is compact and will fit in a sump pit as small as 12" wide. It measures 17%" from the bottom of the pump stand to the top of the wye connector, where it will be attached to the discharge pipe.

Use a pit that conforms to all local codes, and check the code to see if a gate valve or ball valve is required.

The path of the existing vertical discharge pipe to an exterior wall should have the shortest path with the fewest turns. More turns will reduce the pumping capacity.

The discharge pipe must be positioned in a downward slope when it exits the building, allowing any remaining water to drain away. Failure to do this will prevent water from exiting the pit, and damage the pump if the line freezes.

The system should be placed on a flat surface free from dirt and debris. If the bottom of the



17 1/2"

sump pit is not clean, remove as much of the debris as possible. The pumps are attached to a sump foot (stand) to raise them above any debris. **(See Diagram A in column 1 below.)** If you are replacing an old sump pump, unplug the pump from the outlet.

- Remove the check valve or rubber union. (Refer to photo 1 at right.) Discard the check valve. The Pro Series system contains built-in check valves, so the old check valve will not be needed. If the existing system is installed without a check valve or rubber union, saw the pipe apart above the sump pit. (Refer to the diagram in illustration 3 to the right.)
- 2. Remove the old pump from the pit, and unscrew the pipe and pipe adapter from the pump. You can use this pipe to extend the discharge pipe, if needed.
- Measure the distance from the bottom of the sump pit to the end of the discharge pipe. Subtract 18%" (the height of the pump system + 1"). Cut a piece of 1½" rigid PVC pipe to that length.
- (a) Connect this piece to the discharge pipe by cementing the two pieces together with a 1½" PVC pipe connector. (Follow the instructions on the PVC pipe cleaner and cement.) OR, (b) connect the two pieces of pipe together with a no-hub coupling.
- 5. Remove the attached cords and controllers from the carton and place them next to the pump system. MAKE SURE THE CORDS AND CONTROLLERS DO NOT FALL INTO THE SUMP PIT.
- Loosen the hose clamps on the no-hub coupling and slide the coupling up on the discharge pipe. Tighten the upper hose clamp.
- 7. Lift the combination system by the handle on the primary pump and lower it into the

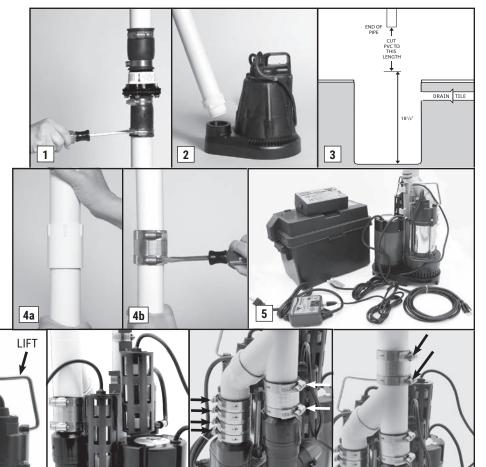
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sump pit. Make sure it is level.

8. Inspect the two float switches. They should both be vertical.

Note: The backup float switch wire includes a connector that can be separated from the controller when the wire needs to be threaded through small openings such as a sump pit cover. Be sure the float switch wire connection is secure before final installation. The primary float switch wire also includes a connector that can be separated from the controller when the wire needs to be threaded through small openings. The float switch connector has a safety locking pin. This pin will prevent the float switch from accidentally being disconnected from the controller. To remove the pin, push the pointed end of the pin into the float connector and pull it out from the other end. The float can now be disconnected from the controller. Make sure to reinstall the pin after the float is reconnected.

- Inspect all of the screws on the hose clamps of the no-hub couplings (primary and backup pumps). They should be tight.
- 10. Position the top of the pump system pipe so that it is directly below the discharge pipe. Connect the system with the nohub coupling, and tighten the upper and lower hose clamps. Make sure both the discharge pipe and the system have ample overlap within the no-hub coupling.



Battery Instructions

This system will accommodate the B12-100 maintenance free (AGM) battery. To double the runtime of the backup system, two of the same model batteries can be connected together. The batteries should be of similar age. Connecting an old and new battery together will not charge properly. Specific connection instructions will be explained below.

Note: The battery will not run the primary pump.

CAUTION

- The use of automotive batteries is NOT recommended. Automotive batteries are not designed for this application. They will only run the pump for a short time and will have a shorter life than a standby battery.
- The internal construction of some wet-cell batteries may not be compatible with this system. The use of a Pro Series B12-100 battery is <u>HIGHLY</u> recommended.

System Connections

🛕 DANGER

Risk of electrical shock or battery explosion, which can cause serious injury or death. Wear eye protection. Work in a wellventilated area. DO NOT smoke or allow a spark or flame in the vicinity of the battery. Avoid dropping metal tools on the battery. Review the safety instructions on page 2.

Secure the backup system control unit to the battery box top by using the included Velcro. Be sure the power cord will reach the AC power outlet, and the pump cable and the float switch will reach the bottom of the sump pit. Position the unit in a well-ventilated area. Do not place anything on top of the battery. Do not place anything on top of the control unit. (Diagram C)

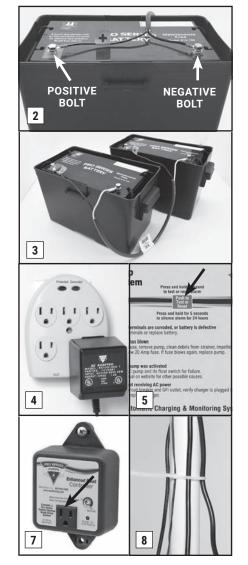
1. **Connecting the backup pump:** Remove the security tag from the pump and plug the pump wires into the pump connector on the back of the control unit.

- 2. **Connecting the battery:** Remove the bolts from the hardware bag. Remove the security tag from the battery cables. Attach the battery cables to the battery—the RED wire to the POSITIVE (+) bolt and the BLACK wire to the NEGATIVE (-) bolt. Screw the bolts into the battery terminals.
- 3. **Connecting two batteries:** If you are connecting two batteries to the system, before you screw in the bolts, connect the additional cable to the two batteries—the

FLOOR JOIST SLOPE PIPE DOWN PRIMARY PUMP CONTROLLER SURGE AC PROTECTOR OUTLET **Diagram C** PRIMARY BACKUP PUMP CHARGER PUMP PRIMARY FLOAT WIRE BACKU FLOAT CABLE TTE BACKUP PUMP CONTROLLER BACKUP PUMP WIRF BATTERY CABLE CABLE TIE TERMINAL TERMINAL BATTERY -NO HUB COUPLING BATTERY______BOX SUMP PIT COVER DRAIN TILE PRIMARY PUMP FLOAT SWITCH BACKUP PUMP PRIMARY ВАСКИР SUMP FOO FUSE 1

RED wires to the POSITIVE (+) posts and the BLACK wires to the NEGATIVE (-) posts of each battery. NEVER attach one end of the positive wire to the positive post and the other end of the positive wire to the negative post on the other battery.

4. **Connecting the charger:** Immediately plug the charger into the charger hole on the back of the control unit, then into an AC outlet on the wall. (You should provide additional protection for the control unit by



using a surge protector.) You will have 10 seconds before the "Power failure" alarm will sound. The alarm will be silenced once the unit is plugged into the wall.

- 5. If any of the alarms are sounding, press the RESET button on the front of the control panel for one (1) second.
- 6. Secure the cover on the battery box by slipping the tabs through the fittings on the front and back of the box.
- 7. Connecting the primary pump: Mount the controller to the wall or the discharge pipe through the 2 holes on the cabinet using proper mounting hardware for the application. The controller should be mounted at least 4' from the floor and 1' from the outlet. Plug the controller into a properly grounded 3-prong outlet. Then plug the primary pump into the receptacle on the controller. Using a flathead screwdriver, adjust the dial on the front of the controller to select the number of seconds that the primary pump will run after the float drops. The dial can be adjusted from 5-45 seconds. The manufacturer default is about 10 seconds.
- 8. For a neater installation, secure the cords from the controllers to the discharge pipe in several places with additional cable ties. Make sure the wires are not touching each other or overlapping each other. Make sure the wires are not touching each other or overlapping each other.
- 9. After the initial installation, be sure to check the pump operation by filling the sump with water and observing the pump through several full cycles. The primary pump should run for about 10 seconds after the lower float drops.
- 10. A pit cover is recommended for all installations as a safety measure, and to prevent debris from falling into the pit. Place the cover on top of the pit making sure not to pinch or crimp the pump wires with the cover. The pit cover usually has an existing hole that will allow the cords to be passed through it, or you can drill a hole in the cover.

Product Operation

The dual float switch on the primary pump contains two large floating rings enclosed within a protective cage. Water will lift the bottom float by about ¼", which will activate the pump. If for any reason the lower float does not activate the pump, the water will rise to the second float, which will activate the pump. As the pump evacuates the water from the pit, the floats will drop. The pump will run for an additional 10 seconds to extend the cycle after the lower float drops. The blue controller for the primary pump powers this process.

During a power outage, or when more water is entering the sump than the primary pump can handle, the backup pump will automatically begin pumping. It also has a dual float switch,

so if one float fails to activate the pump, the second float will activate the pump as soon as the water reaches that level. As the water recedes below the float switch, a timer



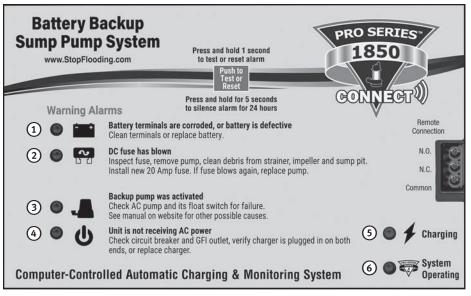
in the control unit will run the pump an additional 25 seconds to empty the pit.

While the pumps are active, water will come out of the ${}^{3}/{}_{16}$ " hole that is drilled in the check valve above the pump. This is normal. The hole is needed to prevent an air lock within the system. **DO NOT** obstruct this hole or an air lock may prevent the pump from activating, and the basement will flood.

Batteries and sump pumps need maintenance. The control unit on the backup system monitors the battery and power conditions, and sounds an alarm when maintenance is required. Following is an explanation of the warnings and alarms.

Understanding the Warnings and Alarms

The Pro Series control unit features a series of warning lights that pinpoint potential problems. In addition, an alarm sounds to alert you to the problem. In some cases the lights and alarm will go off automatically



when the problem has been solved. In others, the RESET button must be pushed to silence the alarm. Refer to the table below for a quick review of the features and their corresponding alarm status.

SILENCING THE ALARM DURING AN EMERGENCY

If the alarm can be silenced before the problem is corrected, you may silence it for two (2) minutes by holding down the RESET button for one (1) second. The alarm will be silenced, but the light will stay on. To silence the alarm for 24 hours, hold down the RESET button for five (5) seconds. It will automatically reset itself after 24 hours. The

| Warning | Alarm can be silenced before problem is corrected | Alarm shuts off automatically when problem is corrected |
|----------------------|--|--|
| Battery problem | No | No, must push RESET button |
| Fuse/pump problem | No | Yes |
| Pump was activated | Yes | No, must push RESET button |
| Power problem | Yes | Yes |

warning light will stay on.

① The battery terminals are corroded or the battery is defective

This light and alarm will come on when the control unit detects that there is less than one-half ($\frac{1}{2}$) hour of pumping power left in the battery, or that the battery is defective. The alarm cannot be silenced, because action needs to be taken to protect your basement. If your battery is more than five (5) years old, replace it. If not, here are several situations that would cause the pump to run the battery for an extended time and discharge the battery: Check the list below before you replace the battery.

- If the bottom light on the controller is also on, it means that the unit is not receiving AC power. Either the AC power is out, the circuit breaker has blown, or the outlet is bad. When the problem is corrected, the battery should recharge.
- If the third light on the controller is also on, check your main pump for failure. The backup pump may have been activated repeatedly if your main AC pump is broken, or you are experiencing heavy rains and your main pump cannot keep up with the inflow of water. You may need to upgrade or

replace your main pump. When the problem is corrected, the battery should recharge.

- If no other lights are on, this means the terminals may be corroded, and the battery cannot charge properly. Unplug the charger from the wall outlet. Then, check the battery cables and the battery terminals for corrosion. Clean and tighten them as needed. The procedure is described on page 7.
- If the battery terminals have been cleaned and the light is still on, there could be a problem with the controller or the battery. The best way to determine if the battery is the problem is to have it charged and load tested at any local car service station. If the battery is bad and less than one (1) year old, it can be returned to the place of purchase for a replacement (receipt required). If the battery is good, contact Glentronics' service department for further instructions. The phone number is 800-991-0466.

If the battery alarm goes on while the pump is running and the power is out, you will have a minimum of one-half (½) hour of continuous pumping time to replace the battery. (In most cases, the pump does not run continuously, and therefore, you actually have a longer time to replace it.) You will not be able to silence the alarm. Left unattended, the basement will flood. In a severe emergency, if a replacement battery is not available, you could temporarily use your car battery, or recharge this battery by connecting it to your car battery.

Once the AC power is restored, the battery will recharge automatically, unless it is old or damaged. The alarm will remain on until the RESET button on the front panel of the control unit is pressed for one (1) second.

In the event that your Pro Series sump pump system has pumped for an extended period of time, the battery may be very depleted. In this condition, when the AC power is returned to the unit, a battery alarm will continue to sound. The battery may need a longer period to recharge.

For a faster recharge, an automotive or marine battery charger can be used to recharge the battery. Follow the manufacturer's instructions and safety information included with the charger.

When another charger is used, first disconnect the Pro Series charger from the control unit, and then disconnect the control unit from the battery. Using another charger without disconnecting the control unit will destroy the control unit and void the warranty.

TO CLEAN THE BATTERY TERMINALS AND CABLES

Risk of electrical shock or battery explosion, which can cause serious injury or death. Wear eye protection. Work in a wellventilated area. Do not smoke or allow a spark or flame in the vicinity of the battery. Avoid dropping metal tools on the battery. If battery acid contacts eyes, flush with water for 15 minutes and get prompt medical attention. Review the safety instructions on page 2.

REFER TO THE PHOTOS BELOW

1. Unplug the charger from the wall outlet,

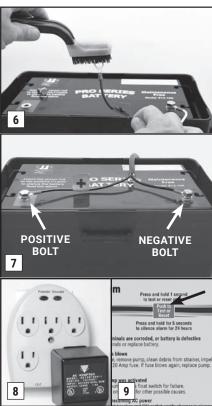




REMOVE

and unplug the AC pump and the blue piggyback controller.

- 2. Remove the cover of the battery box by pushing in the tabs on the front and back, then lifting up.
- 3. Fan the area around the top of the battery with a piece of cardboard (or another <u>nonmetallic</u> material) to remove any hydrogen or oxygen gas that may have been emitted from the battery.
- 4. Remove the bolts from the battery and remove the battery cables.
- 5. Clean the battery posts with a battery terminal cleaner or a wire brush.
- Clean any corrosion off of the ring connectors on the ends of the battery wires. Use a stiff brush or sandpaper.
 DO NOT apply corrosion resisting sprays or pads to the terminal rings or posts after you have cleaned them, since this



could prevent the system from charging properly.

- 7. Replace the battery cables and bolts on the top of the battery. The RED wire to the POSITIVE (+) bolt and the BLACK wire to the NEGATIVE (-) bolt. Screw the bolts into the battery terminals and tighten. Replace the cover on the battery box.
- 8. Plug the charger back into the wall outlet. Then plug the piggyback controller and the AC pump into the outlet. (You should provide additional protection for the backup controller by using a surge protector.)
- 9. If any of the alarms are sounding, press the RESET button on the front panel of the control unit for one (1) second.

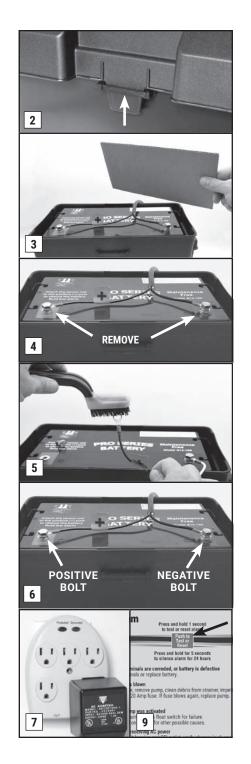
REPLACING THE BATTERY

A DANGER

Risk of electrical shock or battery explosion, which can cause serious injury or death. Wear eye protection. Work in a wellventilated area. DO NOT smoke or allow a spark or flame in the vicinity of the battery. Avoid dropping metal tools on the battery. Review the safety instructions on page 2.

REFER TO THE PHOTOS AT RIGHT

- 1. Unplug the power cord from the wall outlet.
- 2. Remove the cover of the battery box by pushing in the tabs on the front and back, then lifting up.
- 3. Fan the area around the top of the battery with a piece of cardboard (or another <u>nonmetallic</u> material) to remove any hydrogen or oxygen gas that may have been emitted from the battery.
- 4. Loosen the bolts and remove the battery cables. Remove the old battery from the battery box and place the new battery in the box.
- Clean any corrosion off of the ring connectors on the ends of the battery wires. Use a stiff brush or sandpaper.
 DO NOT apply corrosion-resisting sprays or pads to the terminal rings or bolts after you have cleaned them, since this could prevent the battery from charging



properly.

- 6. Replace the battery cables and bolts on the top of the battery. The RED wire to the POSITIVE (+) bolt and the BLACK wire to the NEGATIVE (-) bolt. Screw the bolts into the battery terminals and tighten.
- 7. Plug the charger back into the wall outlet. (You should provide additional protection for the control unit by using a surge protector.)
- 8. Replace the cover on the battery box.
- 9. If any of the alarms are sounding, press the RESET button on the front of the control panel for one (1) second.

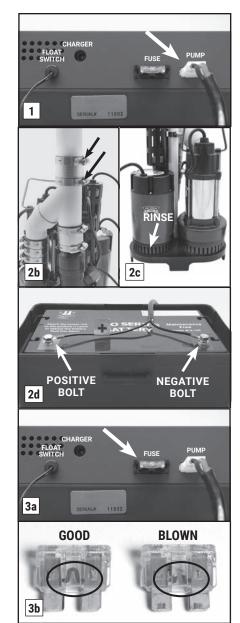
Replace the fuse with a 20 amp auto fuse

Unplug the main AC pump and piggyback controller before servicing the backup pump to avoid electric shock. Failure to do so could cause serious injury or death.

This alarm indicates that the 20 amp safety fuse on the back of the control unit has blown. This can be the result of a clogged pump motor, or pump wires that have been shorted out. To determine the problem:

REFER TO THE PHOTOS AT RIGHT

- Check the pump plug in the back of the control unit to make sure it is firmly connected. Check the pump wires to make sure they are connected securely to the pump plug. Check the rest of the pump wires for any possible breaks.
- If the pump wires are intact, the pump may be clogged. (a) Disconnect the control unit from the wall outlet, and disconnect the battery cables. (b) Release the union and remove the pumps from the sump pit. (c) Clear any debris from the strainer, and then reconnect the pump to the discharge pipe. (d) Connect the control unit, and the battery cables to the battery...RESET the RED wire to the POSITIVE (+) post and then the BLACK wire to the NEGATIVE (-) post. Tighten the bolts on the battery. Replace the cover on the battery box.



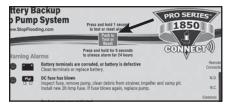
3. (a) Check the DC fuse by pulling it out of the fuse holder. (b) If the wires are burned and broken, replace the fuse with a 20 amp DC safety fuse. If the fuse blows again, unplug the computer control unit from the wall and disconnect the battery cables from the battery. Then call Glentronics technical support for instructions at 800-991-0466. You may need to replace the pump.

4. Plug the main AC pump and piggyback controller back into the wall outlet.

③ The pump was activated

When water rises in the sump pit and lifts the float switch, the pump will begin pumping, and the "Pump was activated" light and alarm will turn on. The pump warning stays on to alert you that the standby system was used to empty the water from the sump pit. Try to determine what caused the system to activate.

- Check the main pump for failure. It may not be working, the float switch may be stuck, or it may be too small to handle the inflow of water.
- Make sure the check valve is working. It may need to be replaced.
- Make sure the discharge pipe is not clogged or frozen.
- If the power was out, the backup pump was automatically activated. You need to push the RESET button to silence the alarm.



(4) The unit is not receiving AC power

There are several causes for power failure. The most common is a power outage by your electric company. During this emergency, the Pro Series system will automatically switch to battery power and protect your basement from flooding.

You can silence the "AC power failure" alarm for 24 hours by pressing the RESET button on the front of the control panel for five (5) seconds. The alarm will be silenced, but the light will stay on. The system will continue to operate while the power alarm is silenced. After 24 hours, the alarm will reset automatically.

- 1. If the power is on in the rest of the house, check the home circuit breaker or fuse box for failure, and correct the problem. Check the outlet to make sure it is working.
- 2. Check the charger. Make sure it is securely plugged into the wall outlet.
- Check the charger plug that fits into the rear panel of the control unit. Make sure it is securely plugged into the control unit.

The control unit must receive 115 volts AC +/- 5% from the AC outlet. Any voltage lower than 110 volts will activate the power failure alarm. Lower voltages can be caused by utility company brown outs or a heavy power draw from other appliances on the same circuit. Reduce the number of appliances on the circuit.

If all the connections are secure and the wall outlet is operating, but the "AC power failure" warning light is still on, replace the charger unit with the Pro Series part number 1015010 from Glentronics at 800-991-0466.

(5) Charging

The Pro Series 1850 backup pump is equipped with a computer-controlled automatic charging system. The computer is constantly monitoring the battery and will supply a preprogrammed amount of energy to keep your battery at full charge. The "Charging" light will be on or flashing while the battery is charging, and off when it is not charging. If the battery is discharged from extended use, the charger light will remain on until the battery is completely recharged.

6 System Operating

This light will always be on when there is power coming from either the battery or the outlet.

REPLACING THE BACKUP PUMP

Before you begin this process, you will need

a new backup pump, new check valves, and new wire ties. The check valves have a $1\frac{1}{2}$ " MPT on one end, and a $1\frac{1}{2}$ " SLIP on the other end. See page 12 for part numbers.



Risk of electrical shock or battery explosion, which can cause serious injury or death. Wear eye protection. Work in a wellventilated area. DO NOT smoke or allow a spark or flame in the vicinity of the battery. Avoid dropping metal tools on the battery. Review the safety instructions on page 2.

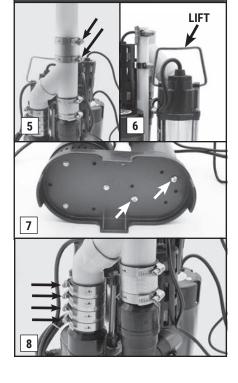
YOU WILL BE DISCONNECTING ALL THE WIRES. BE SURE THEY DO NOT FALL INTO THE SUMP PIT.

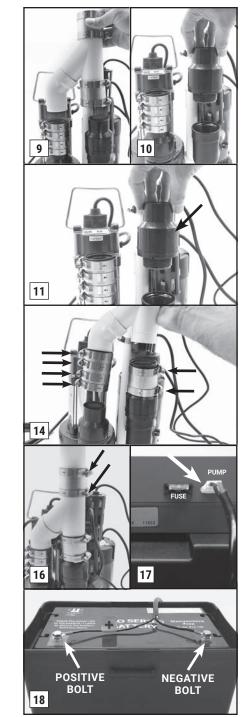
- 1. Unplug the primary pump, the blue controller, and the power cord for the backup pump control unit from the wall outlet.
- 2. Unplug the backup pump from the back of the backup control unit.
- 3. Remove the cover of the battery box and fan the area around the top of the battery with a piece of cardboard (or another <u>nonmetallic</u> material) to remove any hydrogen or oxygen gas that may have been emitted from the battery.
- Remove the battery wires from the battery posts. Be sure they do not touch each other while one is connected to the battery.
- <u>Slowly</u> loosen the no-hub coupling on the top of the combination pump assembly to separate the pipes. The water trapped in the pipe will pour out into the sump as the no-hub coupling is loosened.
- 6. Separate the pump assembly from the nohub coupling and lift it out of the sump pit by the handle on the primary pump. Tip the assembly over the sump pit to drain away any remaining water.
- 7. Lay the pumps down and remove the screws attaching the backup pump to the sump foot.
- 8. Loosen the hose clamps on the no-hub connectors on both pumps.
- 9. Ease the wye assembly off of the pumps.
- 10. Unscrew the pipe adapter from the backup pump.
- 11. While you have the pump apart, this would be a good time to replace the check valves. Contact Glentronics, Inc. to order check valves with a 1½" MPT on one end, a 1½" SLIP on the other end and a pre drilled ³/₁₆" air bleed hole (#1141007). The ³/₁₆"air bleed hole is required to help prevent an air













lock within the system.

- 12. Now, reverse the process. Replace the pump by first screwing the adapter assembly into the new pump.
- 13. Screw the pump to the pump stand.
- 14. Ease the wye assembly back onto the check valves, and tighten the hose clamps.
- 15. Lower the pumps into the sump pit by the handle on the primary pump.
- 16. Ease the wye assembly back into the nohub coupling on the discharge pipe and tighten the hose clamps.
- 17. Connect the backup pump to the back of the backup control unit.
- 18. Connect the battery wires to the battery bolts, the RED to the POSITIVE (+) post and BLACK wire to the NEGATIVE (-) post. Screw the bolts into the battery terminals and tighten. Replace the cover on the battery box.
- 19. Plug the power cord from the backup control unit into the outlet. You should provide additional protection for the system by using a surge protector.
- 20. Plug the primary pump into the receptacle on the blue controller and then plug the power cord from the controller into the wall outlet.
- 21. If any of the alarms are sounding, press the RESET button for 1 second.
- 22. After the backup pump is replaced, be sure to check the pump operation by filling the sump pit with water and observing the pump through several full cycles.

REPLACING THE PRIMARY PUMP

Before you begin this process, you will need a new AC pump, new check valves, and new wire ties. The check valves have a $1\frac{1}{2}$ " MPT on one end, and a $1\frac{1}{2}$ " SLIP on the



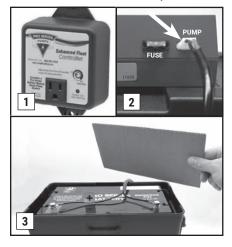
other end. See page 12 for part numbers.

A DANGER

Risk of electrical shock or battery explosion, which can cause serious injury or death. Wear eye protection. Work in a wellventilated area. DO NOT smoke or allow a spark or flame in the vicinity of the battery. Avoid dropping metal tools on the battery. Review the safety instructions on page 2.

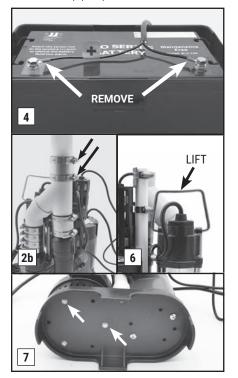
YOU WILL BE DISCONNECTING ALL THE WIRES. BE SURE THEY DO NOT FALL INTO THE SUMP PIT.

- 1. Unplug the primary pump, the blue controller, and the power cord for the backup control unit from the wall outlet.
- 2. Unplug the backup pump from the back of the backup control unit.
- 3. Remove the cover of the battery box and fan the area around the top of the battery with a piece of cardboard (or another <u>nonmetallic</u> material) to remove any hydrogen or oxygen gas that may have been emitted from the battery.



- Remove the battery wires from the battery posts. Be sure they **DO NOT** touch each other while one is connected to the battery.
- <u>Slowly</u> loosen the no-hub coupling on the top of the combination pump assembly to separate the pipes. The water trapped in the pipe will pour out into the sump as the no-hub coupling is loosened.
- 6. Lift the pump assembly out of the pit by the handle on the primary pump. Tip the assembly over the sump pit to drain any remaining water.
- Lay the pumps down and remove the three

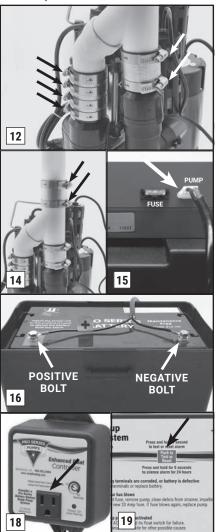
 (3) screws holding the primary pump to
 the sump foot. The strainer on the primary
 pump will separate from the pump when
 the screws are removed. SAVE THESE
 SCREWS or replace them with #10-24 x
 1½" stainless-steel screws.
- Loosen the hose clamps on the no-hub connector on top of the primary pump and ease the pump out of the connector. You may need to loosen the hose clamps on the backup pump.



- 9. While you have the pump apart, this would be a good time to replace the check valves. Contact Glentronics, Inc. to order check valves with a 1½" MPT on one end, a 1½" SLIP on the other end and a pre drilled ³/₁₆" air bleed hole (#1141007). The ³/₁₆"air bleed hole is required to help prevent an air lock within the system.
- 10. Remove the screws from the strainer on the new primary pump and discard them before you place it on the sump foot. You will need to thread the old screws through the foot, the strainer and into the pump.
- 11. Line up the discharge pipes parallel to each other and start with the top screw. Once the top screw is replaced, the other screws will line up with the holes. Tighten all the screws.
- 12. Ease the pump back into the no-hub connector and tighten the hose clamps.



- 13. Lower the pump back into the pit by the handle of the primary pump.
- 14. Connect the top of the system to the nohub coupling and tighten the hose clamp.
- 15. Connect the backup pump to the back of the backup control unit
- 16. Connect the battery wires to the battery bolts, the RED to the POSITIVE (+) post and BLACK wire to the NEGATIVE (-) post. Screw the bolts into the battery terminals and tighten. Replace the cover on the battery box.



- 17. Plug the power cord from the backup control unit into the outlet. You should provide additional protection to the system by using a surge protector.
- 18. Plug the primary pump into the receptacle on the blue controller and then plug the power cord from the controller into the wall outlet.
- 19. If any of the alarms are sounding, press the RESET button for 1 second.
- 20. After the primary pump is replaced, be sure to check the pump operation by filling the sump pit with water and observing the pump through several full cycles.

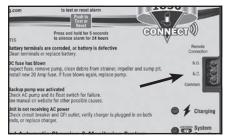
Using the Remote Notification

THE REMOTE TERMINAL

The Pro Series 1850 can be connected to a home security system or other alarm devices to alert you to a problem or required maintenance.

INSTRUCTIONS FOR CONNECTING THE REMOTE ALARM

The terminal is located on the front of the control unit. There are three (3) positions for wire connections on the terminal: N.C. (Normally Closed), N.O. (Normally Open), and Common.



Check your security system to determine whether an open (no contact) or closed (making contact) connection is needed to activate the alarm.

The security system will provide two connection terminals. You will need to extend wires from the security system to the Pro Series control unit. Strip the two wires, ¼"

each. Connect either wire to the common

terminal. To secure the wire into the terminal, insert the exposed wire into the hole on the back of the terminal next to the screw marked Common. Turn the screw a few turns to lock in the wire.

If the security system requires a closing of a contact to activate the alarm, secure the other wire in the terminal hole labeled N.O. (Normally Open). If the security system requires an opening of a contact, secure the wire in the terminal hole labeled N.C. (Normally Closed).

USB DATA PORT

This system has been updated with a USB port on the side of the controller. The purpose of this port is to allow communication with the Pro Series CONNECT Module. **DO NOT** connect any other device to the USB data port other than a Pro Series Wifi CONNECT Module.



CONNECT MODULE



The Pro Series CONNECT Module is a separately sold accessory that will allow the user to stay connected and receive remote notifications of potential problems and needed maintenance while away from home.

Pro Series WiFi Module (Model PS-WiFi2)

 Sends texts, emails or in-app notifications and status alerts to your phone, tablet or computer No required monthly or yearly fees or subscriptions



Model PS-WiFi2

For more information, please visit www.StopFlooding.com

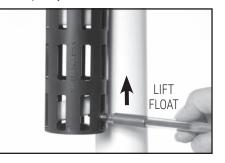
TESTING THE FLOAT SWITCH FOR THE BACKUP PUMP

It is important to manually test the float switches periodically or after any maintenance.

A DANGER

Unplug the main AC pump when installing or servicing the backup pump to avoid electric shock. Failure to do so could cause serious injury or death. Review the safety instructions on page 2.

Lift the float up with a pencil, or another nonmetallic item, and let go. This will activate the pump. The control unit will run the pump for approximately 25 seconds so it can empty all the water in the sump pit. If no water is in the pit, the pump can run dry for this amount of time. The alarm will sound and the "Pump was activated" light will go on. After the pump has stopped, push the RESET button to silence the alarm. If the RESET button is pressed before the pump has stopped, the alarm will go off temporarily. Wait for the pump to stop pumping, and then push the RESET button on the front of the control unit to completely silence the alarm.





While the pumps are active, water will come out of the 3/16" hole that is drilled in the check valve above the pump. This is normal. The hole is needed to prevent an air lock within the system. **DO NOT** obstruct this hole or an air lock may prevent the pump from activating, and the basement will flood.

BE SURE TO PLUG IN THE MAIN AC PUMP WHEN YOU HAVE COMPLETED THE TEST.

TESTING THE FLOAT SWITCH FOR THE PRIMARY PUMP

Lift the float up with a pencil, or another nonmetallic item, and let it go to activate the pump. The pump will run an additional 10 seconds after the float returns to the original position. It will not damage the pump to run it for this short time if the sump pit is dry. However, **DO NOT** hold the float up for an extended time without water in the sump pit.

While the pumps are active, water will come out of the ${}^{3}/{}_{16}$ " hole that is drilled in the check valve above the pump. This is normal. The hole is needed to prevent an air lock within the system. **DO NOT** obstruct this hole or an air lock may prevent the pump from activating, and the basement will flood.

MAINTENANCE CHECKLIST

Maintenance should be performed 1-2 times per year.

- 1. Lift the float switches on both pumps as described on page 11.
- 2. Remove all debris from the bottom of the pit and pump strainer.
- 3. Remove all debris floating in the water.
- 4. Remove all debris from the float switch cage.
- 5. Fill the pit with water. Make sure the pumps turn on at the intended levels.
- 6. While the pump is running, make sure the pump is evacuating water at a good pace and water is coming out of the 3/16" air bleed hole.
- 7. Check and clean battery terminals.

PARTS & SERVICE INFORMATION

You can receive technical support, parts, or service information by calling Glentronics, Inc., at **800-991-0466** or by visiting the Pro Series website at **www.stopflooding.com**. Send your unit to the following address if repairs are needed:

> Glentronics, Inc. Attn: Service 645 Heathrow Drive, Lincolnshire, IL 60069-4205

> > Part

Replacement Parts List

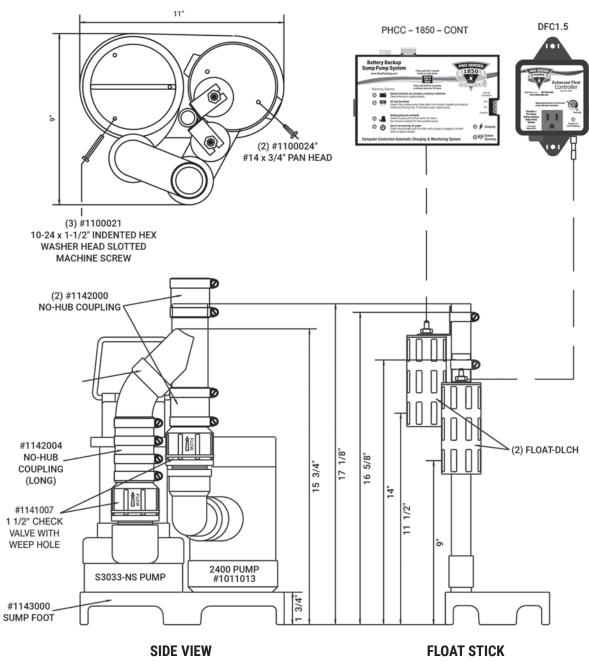
PS-C30 Description

| Controller for backup pump Pl Enhanced dual float switch with controller | HCC-1850-CONT |
|---|--------------------|
| for AC pump $1/_3$ HP AC sump pump | DFC1.5 S3033-NS |
| PHCC-2400 backup pump | 1011013 |
| Battery box | 1113003 |
| PVC wye pipe and 45° elbow | 1120017 |
| Sump foot | 1143000 |
| Instructions | 1806065 |
| Stainless-steel screw, #10-24 x 1½" * | 1100021 |
| #14 x ³ /4" pan-head screws | 1100024 |
| Caged dual float switch | FLOAT-DLCH |
| Stainless-steel hose clamp, 2½" diameter * | 1122002 |
| Check valve, 1½" MPT x 1½" SLIP with weep hole * | 1141007 |
| No-hub coupling, 1½" * | 1142000 |
| No-hub coupling (long) | 1142004 |

*Stock items available in plumbing department

Call 800-991-0466 to order parts.





Primary Pump Troubleshooting Guide

$\label{eq:read} \ensuremath{\mathsf{Read}}\xspace \ensuremath{\mathsf{safety}}\xspace \ensuremath{\mathsf{warnings}}\xspace \ensuremath{\mathsf{samma}}\xspace \ensuremath{\mathsf{namma}}\xspace \ensuremath{\mathsf{abs}}\xspace \ensuremath{\space}\ensuremath{\mathsf{abs}}\xspac$

| Pump is not plugged in Plug pump in properly (see instructions) No AC power. Check circuit breaker or fuse, and GFI reset button Poor power source. Check connection of float switch wires cable and outlet Float switch wire is not connected to the controller. Check connection of float switch with exist obstruction Defective float switch Replace float switch with new float switch Defective float switch Replace float switch with new float switch Incorrect power supply Check power supply source and voltage Pump running continuously with no water present. Check float switch Potential Cause PUMP STARTS AND STOPS TOO FREQUENTLY Solutions Float switch Replace float switch Replace float switch Potential Cause PUMP VILL NOT SHUT OFF Solutions Float switch Replace float switch Replace float switch Potential Cause PUMP WILL NOT SHUT OFF Solutions Clogged or frozen discharge Clear debris from inside the float cage (Loosen nut on top of float, then replace chelp on bottom of f | Potential Cause THE PUMP WILL | NOT START OR RUN | Solutions |
|---|---|---|---|
| Locked impeller Remove strainer and clear obstruction Incorrect power supply Check hoat switch Potential Cause PUMP STARTS AND STOPS TOO FREQUENTLY Solutions Float switches mounted too low Raise both float switches Solutions Potential Cause PUMP WILL NOT SHUT OFF Solutions Malfunctioning float switch. Replace float switch with new float switch Potential Cause PUMP WILL NOT SHUT OFF Solutions Clogged or frozen discharge Clear blockage or thaw frozen line Blocked intake strainer One or both of the floats is obstructed and cannot drop down Clear debris from inside the float cage (Loosen nut on top of float, ther replace clip on bottom of float. Remove debris. Tighten nut on top of float, ther memove debris. Tighten nut on top of float, ther memove debris. Tighten nut on top of float, ther memove debris. Tighten nut on top of float, ther memove debris. Tighten nut on top of float, ther memove debris. Tighten nut on top of float, ther memove debris. Tighten nut on top of float, ther magnetic strip on the inside of the float switch Defective float switch Replace float switch with new float switch Check valve is stuck. Replace check valve Potential Cause INSUFFICIENT OR NO WATER VOLUME Solutions Check valve is secondary pump will not close and water recirculates within the system. Replace the check valve on | No AC power. Poor power source. Float switch wire is not connected to the controller Locked impeller Defective float switch | Check circuit breaker or fuse, and GFI re Check circuit line wires, cable and outlet Check connection of float switch wire to Remove strainer and clear obstruction Replace float switch with new float switc | controller |
| Incorrect power supply Check power supply source and voltage Pump running continuously with no water present. Check float switch Potential Cause PUMP STARTS AND STOPS TOO FREQUENTLY Solutions Float switches mounted too low. Raise both float switches Install or replace check valve Water back flowing from pipe. Install or replace check valve Replace float switch with new float switch Potential Cause PUMP WILL NOT SHUT OFF Solutions Clogged or frozen discharge. Clear blockage or thaw frozen line Solutions Blocked intake strainer Clear debris from inside the float cage (Loosen nut on top of float, then replace c-clip on bottom of float. Remove debris. Tighten nut on top of float, then replace c-clip on bottom of float. Remove debris. Tighten nut on top of float, then regreate check valve Defective float switch Replace float switch with new float switch Replace float switch with new float switch Defective float switch Replace float switch with new float switch Replace the check valve Solutions Obstential Cause INSUFFICIENT OR NO WATER VOLUME Solutions Check valve is stuck. Replace the check valve Solutions Defective float switch in the system. Replace the check valve on the secondary pump Replace the check valve Solut | Potential Cause THERMAL PROTECTOR | TRIPPING OR NOT FUNCTIONING | Solutions |
| Float switches mounted too low. Raise both float switches Water back flowing from pipe Install or replace check valve Malfunctioning float switch. Replace float switch with new float switch Potential Cause PUMP WILL NOT SHUT OFF Solutions Clogged or frozen discharge. Clear blockage or thaw frozen line Clear debris from intake strainer One or both of the floats is obstructed and cannot drop down Clear debris from inside the float cage (Loosen nut on top of float, then replace c-clip on bottom of float. Remove debris. Tighten nut on top of float, then replace c-clip on bottom of float. Switch Defective float switch Replace float switch with new float should be facing down. Replace float switch witch is stuck. Replace float switch with new float switch Check valve is stuck. Replace float switch with new float switch Check valve is stuck. Replace the check valve on the secondary pump Partially blocked impeller Remove strainer and clear obstruction Clogged or frozen discharge pipe. Clear blockage or thaw frozen line Low power voltage. Check valve. Replace the check valve on the secondary pump Partially blocked impeller Remove strainer and clear obstruction Clear blockage or thaw frozen line Defective is stuck. Replace check valve. | Incorrect power supply | Check power supply source and voltage | |
| Water back flowing from pipe Install or replace check valve Malfunctioning float switch Replace float switch with new float switch Potential Cause PUMP WILL NOT SHUT OFF Solutions Clogged or frozen discharge Clear blockage or thaw frozen line Clear debris from intake strainer One or both of the floats is obstructed and cannot drop down Clear debris from inside the float cage (Loosen nut on top of float, then remove c-clip on bottom of float. Remove debris. Tighten nut on top of float, then replace c-clip on bottom of float. When reassembling the float, magnetic strip on the inside of the float switch Replace float switch with new float switch Defective float switch INSUFFICIENT OR NO WATER VOLUME Solutions Check valve on secondary pump will not close and water recirculates within the system. Replace the check valve on the secondary pump Partially blocked impeller Clogged or frozen discharge pipe Clear blockage or thaw frozen line Solutions Check valve is stuck. Replace the check valve on the secondary pump Partially blocked impeller Replace the check valve on the secondary pump Partially block in the system. Replace float swite or the 716" air bleed hole located on the check valve is clear of debris There is an air lock in the system. Replace check valve. Replace check valve. There is an air lock in the system. The float switch is not connected to the controller. | Potential Cause PUMP STARTS AND S | TOPS TOO FREQUENTLY | Solutions |
| Clogged or frozen discharge Clear blockage or thaw frozen line Blocked intake strainer Clear debris from intake strainer One or both of the floats is obstructed and Clear debris from inside the float cage (Loosen nut on top of float, then remove c-clip on bottom of float. Remove debris. Tighten nut on top of float, then replace c-clip on bottom of float, then replace c-clip on bottom of float, the magnetic strip on the inside of the float should be facing down. Defective float switch Replace float switch with new float switch Check valve is stuck. Replace check valve Potential Cause INSUFFICIENT OR NO WATER VOLUME Solutions Clear debris from inside the check valve Solutions Check valve on secondary pump will not close and water recirculates within the system. Replace the check valve on the secondary pump Partially blocked impeller Remove strainer and clear obstruction Clear blockage or thaw frozen line Broken or leaking pipe Check power voltage, wires and cable condition Replace check valve. There is an air lock in the system. Make sure the ³ / ₁ ar is bleed hole located on the check valve is clear of debris The float switch is not connected to the controller. Check connection of the float switch to the controller Potential Cause ABNORMAL SOUND OR VIBRATION Solutions Check valve is broken | Water back flowing from pipe | Install or replace check valve | ch |
| Blocked intake strainer Clear debris from intake strainer One or both of the floats is obstructed and Clear debris from inside the float cage (Loosen nut on top of float, then remove c-clip on bottom of float. Remove debris. Tighten nut on top of float, then replace c-clip on bottom of float, then replace c-clip on bottom of float, then replace c-clip on bottom of float, the magnetic strip on the inside of the float switch Defective float switch Replace float switch with new float switch Check valve is stuck. Replace float switch with new float switch Replace float switch with new float switch Replace check valve Potential Cause INSUFFICIENT OR NO WATER VOLUME Solutions Check valve on secondary pump will not close and water recirculates within the system. Replace the check valve on the secondary pump Partially blocked impeller Clear blockage or thaw frozen line Repair pipe Cowperv voltage. Check power voltage, wires and cable condition Check valve is stuck. Replace check valve. Make sure the ³ /1s'' air bleed hole located on the check valve is clear of debris The float switch is not connected to the controller. Check connection of the float switch to the controller Potential Cause ABNORMAL SOUND OR VIBRATION Solutions Check valve is broken Replace the check valve Check valve | Potential Cause PUMP WILL | NOT SHUT OFF | Solutions |
| Check valve on secondary pump will not close Replace the check valve on the secondary pump Partially blocked impeller Replace the check valve on the secondary pump Clogged or frozen discharge pipe Clear blockage or thaw frozen line Broken or leaking pipe Repair pipe Low power voltage. Check power voltage, wires and cable condition Check valve is stuck. Replace check valve. There is an air lock in the system. Make sure the 3/16" air bleed hole located on the check valve is clear of debris The float switch is not connected to the controller. Check connection of the float switch to the controller Potential Cause ABNORMAL SOUND OR VIBRATION Solutions Check valve is broken Replace the check valve Blocked intake screen Clear debris from intake screen | Blocked intake strainer One or both of the floats is obstructed and cannot drop down Defective float switch Check valve is stuck. | Clear debris from intake strainer Clear debris from inside the float cage (L of float, then remove c-clip on bottom of debris. Tighten nut on top of float, then r bottom of float.) When reassembling the strip on the inside of the float should be Replace float switch with new float switch Replace check valve | float. Remove replace c-clip on float, the magnetic facing down. ch |
| and water recirculates within the system. Replace the check valve on the secondary pump Partially blocked impeller Remove strainer and clear obstruction Clogged or frozen discharge pipe. Clear blockage or thaw frozen line Broken or leaking pipe. Repair pipe Low power voltage. Check power voltage, wires and cable condition Check valve is stuck. Replace check valve. There is an air lock in the system. Make sure the ³ /16" air bleed hole located on the check valve is clear of debris The float switch is not connected to the controller. Check connection of the float switch to the controller Potential Cause ABNORMAL SOUND OR VIBRATION Solutions Check valve is broken Replace the check valve Clear debris from intake screen | | NO WATER VOLUME | Solutions |
| Check valve is broken Blocked intake screen | and water recirculates within the system. Partially blocked impeller Clogged or frozen discharge pipe. Broken or leaking pipe. Low power voltage. Check valve is stuck. There is an air lock in the system. | Remove strainer and clear obstruction Clear blockage or thaw frozen line Repair pipe Check power voltage, wires and cable co Replace check valve. Make sure the ³ /16" air bleed hole located valve is clear of debris | ondition d on the check |
| Blocked intake screen | Potential Cause ABNORMAL SOU | IND OR VIBRATION | Solutions |
| | Blocked intake screen | Clear debris from intake screen | |

If the listed solutions do not resolve the problem, follow the instructions within the manual to disconnect the system from the outlet and battery terminals, then reconnect the system and push the reset button. If the problem continues, contact Glentronics customer service at 800-991-0466.

Backup Pump Troubleshooting Guide

A DANGER

Read safety warnings & instructions before attempting any repairs or maintenance.

| Read Sarety Warnings & Instruction | is before alle | inpung any repairs of n | lamtenanoe. |
|--|---|--|---|
| Potential Cause | BATTERY PR | OBLEM | Solutions |
| Terminals are corroded | Tiç Re | ghten wing nuts or bolts place battery if power is out. Onl wer is left, Battery will recharge | y 1 hour of continuous pumping when power is restored |
| Potential Cause | | | Solutions |
| Power outage An outlet, fuse, or circuit breaker has failed. The power cord is unplugged from the wall. The charger is receiving less than 110 volts the outlet. | No ho Tr Mi from | one. The backup pump will run old the reset button to silence t y another outlet, replace the fu ake sure the power cord is plu one. if the utility company has | off the battery. Press and the alarm for 24 hours se, or reset the circuit breaker gged in securely instigated brownouts. |
| | | | other appliances on the circuit |
| Potential Cause | | LURE | Solutions |
| Backup pump is unplugged Backup pump is clogged Backup pump is broken | co Re | ntrol unit emove strainer from pump and | plugged into the back of the clean out any debris |
| | PUMP WAS AC | | Solutions |
| The main AC pump failed because of a power | | | |
| The float switch on the main AC pump is stu defective. The main AC pump is broken The main AC pump could not keep up with t of water. | ick or Fri Re he inflow | ee the float switch on the mair | n pump or replace it |
| The check valve is stuck or installed improprivate water cannot pass through it | ree erly and the Re | curring problem, install a higher eplace the check valve or corre | er capacity main pump |
| The discharge pipe is clogged or frozen and cannot pass through it There is a slight chance of false activation if switch cord is wrapped around the AC powe | Th the float | - | |
| Potential Cause | | | |
| Pump is clogged. | | | |
| Pump wires are exposed | the Re Re | e 25 amp DC fuse eplace the pump eplace the pump | an out any debris. Replace |
| Potential Cause WATE | R WILL NOT L | EAVE THE PIT | Solutions |
| No check valve Check valve is broken or installed improperly Discharge pipe is clogged or frozen The float switch is not connected to the con There is an air lock in the system Backup pump is unplugged | If u su pip /Mi Cli trollerCh trollerMi be is Mi co | connecting backup to the prim re there is a check valve on bo pes below the tie-in point ake sure check valve is function ear the discharge pipe heck connection of the float sw ake sure the 3/16" weep hole is show the check valve, but above clear of debris ake sure the pump is securely introl unit | oth the main and backup oning and installed properly witch to the controller drilled in the discharge pipe e the water line. Make sure it plugged into the back of the |
| Potential Cause SYSTEM DOES | NOT OPERATE | E AFTER INSTALLATION | Solutions |
| The battery cables are connected backwards | s Re | everse the battery connections | |

Limited Warranty

By opening this package and using this GLENTRONICS, INC. product, you are agreeing to be bound by the terms of the GLENTRONICS, INC. limited warranty") as set out below. Do not use your product until you have read the terms of the warranty. If you do not agree to the terms of the warranty, do not use the product and return it within the return period stated on your purchase receipt from the retail store or authorized distributor where you purchased it for a refund.

To the extent permitted by law, this warranty and the remedies set forth are exclusive and in lieu of all other warranties, remedies and conditions, whether oral, written, statutory, express or implied. GLENTRONICS, INC. disclaims all statutory and implied warranties, including without limitation, warranties of merchantability and fitness for a particular purpose and warranties against hidden or latent defects, to the extent permitted by law. GLENTRONICS, INC. will not be liable for any incidental, special or consequential damages for breach of any express or implied warranties on this product. In so far as such warranties cannot be disclaimed, GLENTRONICS, INC. limits the duration and remedies of such warranties to the duration of this express warranty and, AT GLENTRONICS, INC.'s option, the repair or replacement services described below. Some states (countries and provinces) do not allow limitations on how long an implied warranty (or condition) may last, so the limitation described above may not apply to you.

Any and all causes of action arising from, filed as a result of or in reference to, this warranty or the products described under this warranty shall be governed by and construed under the laws of the State of Illinois. Any cause of action arising from, filed as a result of or in reference to, this warranty or the products described under this warranty shall be filed only in the Circuit Court of the 18th Judicial District, Lake County, Waukegan, Illinois, or in the Northern District of Illinois if filed in Federal Court. The maximum liability for any product described in this warranty shall be the cost of product replacement only.

If any term is held to be illegal or unenforceable, the legality or enforceability of the remaining terms shall not be affected or impaired.

What is Covered by this Warranty?

GLENTRONICS, INC. warrants to the end purchaser that its pumps, switch and control unit products are free from defective materials and workmanship for the periods indicated below:

All parts and labor (excluding installation) for a period of:

• 4 years from the date of installation, when purchased and installed by a contractor; otherwise, 3-year warranty applies when used intermittently as a sump pump.

The defective product must be returned directly to the factory, postage prepaid with the original bill of sale or receipt to the address listed below. GLENTRONICS, INC., at its option, will either repair or replace the product and return it postage prepaid.

What is NOT Covered by this Warranty?

This warranty does not cover the cost or value of damaged property, including expressly any property that has been affected by water overflow, seepage or flooding. If GLENTRONICS, INC. determines that a product is deemed defective under this warranty agreement, it will repair or replace the PRODUCT ONLY. GLENTRONICS, INC. will not cover the cost to reinstall the product, nor will GLENTRONICS, INC. pay the cost of having a plumber or contractor repair or replace the product.

GLENTRONICS, INC. will not repair or replace a product that was installed incorrectly. A product shall be considered "installed incorrectly" when it deviates in any way from the instructions described in this manual.

This warranty does not cover product problems resulting from handling liquids hotter than 104 degrees Fahrenheit, handling inflammable liquids, solvents, strong chemicals or severe abrasive solutions; user abuse; misuse, neglect, improper maintenance, commercial or industrial use; improper connection or installation, damages caused by lightning strikes; excessive surges in AC line voltage; water damage to the controller; other acts of nature, or failure to operate in accordance with the enclosed written instructions.

How to Obtain Warranty Service

Within thirty (30) days of the product's defective performance, the unit must be shipped, freight prepaid, or delivered to GLENTRONICS, INC. to provide the services described hereunder in either its original carton and inserts, or a similar package affording an equal degree of protection. Products not received by GLENTRONICS, INC. at the address indicated below within thirty (30) days of the product's defective performance will not be considered for warranty service. Products received after three (3) years from the date of purchase, fall outside of the timeframe for warranty service and will not be eligible for warranty service. The product must be returned to GLENTRONICS, INC. for inspection in order to be considered for warranty service. If the product is not returned to GLENTRONICS, INC. or the product is inspected by any person, plumber, contractor or business other than GLENTRONICS, INC., this warranty shall no longer be valid. Prior to defective operation, the unit must not have been previously altered, repaired or serviced by anyone other than GLENTRONICS, INC., or its agent; the serial number on the unit must not have been altered or removed; the unit must not have been subject to accident, misuse, abuse or operated contrary to the instructions contained in the accompanying manual. The dealer's dated bill of sale, or installer's invoice must be retained as evidence of the date of purchase and to establish warranty eligibility.

Where are Products Sent for Warranty Service?

Glentronics, Inc., 645 Heathrow Drive, Lincolnshire, IL 60069

How Can I Obtain More Information?

By calling 800-991-046

Additional Products to Help Protect Your Basement

Maintenance Free Battery B12-100



Compatible with:

 All current Pro Series backup and combo systems

Pro Series Maintenance Free/AGM Standby Batteries are designed to:

- Provide dependable service without having to add battery fluid or distilled water
- Run the pump longer for more hours per charge
- Work with all backup and combination systems
- Last longer in standby operation



Clenit[™] Pump and Pit Cleaner ^{CL7}



FEATURES AND BENEFITS:

- Removes iron ochre, the red slime buildup, from your sump system and pit
- Helps to keep your pump and pit healthy
- Great solution for periodic pit maintenance

Easy to Use:

- Pour Clenit[™] into your sump system
- Allow the proprietary powder to attack the iron ochre
- Fill your pit with water so that your pump evacuates the pit and expels the iron ochre

Pro Series CONNECT[™] WiFi2 Module PS-WIFI2



FEATURES AND BENEFITS:

- Sends emails, texts or in-app notifications and status alerts to your phone, tablet or computer
- NO MONTHLY FEE
- Connect using home Wi-Fi
- Simple setup
- Pro Series CONNECT free mobile app allows you to see your backup pump status and receive updates

Sewage Pump E7055



FEATURES AND BENEFITS:

- ½ HP
- 5,340 GPH (89 GPM) at 10' lift
- Cast-iron construction
- Energy-efficient permanent split capacitor (PSC) motor
- Handles 2" solids through a 2" discharge
- Continuous-duty rated
- Dual carbon/ceramic seals plus (1) Buna-N-Seal
- Upper and lower sealed ball bearings
- Stainless-steel fasteners
- Cast-iron impeller
- 3-year warranty

Water Alarms & Accessories

Water Alarm PWA2



FEATURES AND BENEFITS:

- Minimizes the risk of water damage
- Detect leaks before they become bigger problems by placing a Pro Series water alarm wherever water damage is a risk
- 110 db alarm sounds when as little as ¹/₃₂" of water reaches the sensor
- Helps keep MOLD away by alerting to its major cause—water
- Includes 6' of sensor wire for remote monitoring
- Wire can be extended to over hundreds of feet
- Standalone water alarm has built-in accessory jack for optional add-on accessories

360° Sensor

PS-WS360



FEATURES AND BENEFITS:

- Patented 360° sensing technology detects water when placed on any side, top or bottom
- Use with the Pro Series Water Alarm (PWA2)
- When water reaches the 360° water sensor, an audible alarm will sound on the connected device
- 360° water sensor is only ½" thick, making it perfect for monitoring in tight spaces such as on the floor, or anywhere water damage is a risk
- Can monitor multiple locations by connecting additional sensors with no extra hardware
- Includes 20' cord

360° Water Alarm PWA-360



FEATURES AND BENEFITS:

- Patented design allows the device to sense water on any side
- Detects as little as ¹/₃₂" of water
- Small size (2³/₈" x 1" x 3 ¹/₄") fits in tight spaces
- Loud 110 dB alarm easy to hear anywhere in the house
- Waterproof to ensure the device works when it counts
- Save money by detecting leaks early, heading off costly water damage and mold
- Solid-state circuitry is both very sensitive and reliable
- Only extracts power from the battery when the alarm is sounding, extending battery life

Pro Series CONNECT[™] High Water Accessory PS-WS



FEATURES AND BENEFITS:

- Will activate a warning light, an audible alarm, send a signal to the remote terminal, and send information through the USB port when water reaches the sensor
- Use with the Pro Series Deluxe Float Controller (DFC2, VSC2 and TSC2) and Water Alarm (PWA2)
- Attaches to the discharge pipe with included mounting hardware
- 10' cord with plug



20-Ft. Extension



FEATURES AND BENEFITS:

- For use with 360° Sensor (PS-WS360) and Water Sensor (PS-WS)
- 20' cord
- Rubber gasket and sleeve for waterproofing the connection between the extension and sensor